DATA VALIDATION SUMMARY

Sample			Sampling			DQC	$0s^4$				Field and Trip
Delivery	Data Validation	Samples	Round	Lab	Precision	Accuracy	Detection	Completeness	Major	Analyses	Blank
Group	Report Date	Validated					Limits		Deficiencies		Samples ⁵
1	8-Jun-94	Private Wells (All)	1	ARI	V	\checkmark	√	100%	None	General Chem,TAL metals, pesticides/PCBs,SVO A	PW2-51094FB
2	7-Jun-94	Private Wells (All)	1	Inland	√	\checkmark	V	100%	None	525.1, 524.2	PW2-5594TB, PW2- 51094FB
3	19-May-94	Portal Soils	1	ARI	V	V	V	99.60%	See Note 1	TCL VOAs and SVOAs, pesticides/PCBs, TAL metals, anions, cyanide	None
4	18-May-94	Monitoring Wells and Portal (Surface) Water	1	ARI	V	√	1	100%	NONE	TCL SVOAs, pesticides/PCBs,TAL metals,general chemistry	LMW1-GW-41494FB
5	25-May-94	Monitoring Wells and Surface Water	1	Inland	V	√	√	100%	NONE	515.1,504,525.1,524.2, 531	LMW1-GW-41494FB
6	17-May-94	Backhoe Trench Soils	1	ARI	V	√	√	100%	NONE	anions, cyanide,TAL metals,TCL VOAs and SVOAs, pesticides/PCBs	Trip Blank
7	18-May-94	Trench Rim Soils	1	ARI	~	V	√	99.00%	See Note 1	anions, cyanide,TAL metals,TCL VOAs and SVOAs, pesticides/PCBs	None
8	18-May-94	Soil Drum Composites	NA	ARI	√	V	V	100%	None	TCL VOAs and SVOAs, pesticides/PCBs, TAL metals	None
9 ³	6-Oct-94	Private Wells (All)	2	Inland	See Note 2	V	V	100%	None	VOA (524.2)	PW6-82394FB PW7-82394TB PW10- 82394TB PW9- 82394TB PW6- 82394TB
10 ³	6-Oct-94	PW-2, PW-10	2	ARI	See Note 2	√	√	100%	None	General chem, cyanide, TAL metals, TCL VOAs, pesticides/PCBs	None
11 ³	6-Oct-94	PW-4,-5,-6 and -7	2	ARI	See Note 2	1	V	100%	None	General chem, cyanide, TAL metals, TCL VOAs, pesticides/PCBs	PW6-82394FB
12 ³	6-Oct-94	PW-1,-12,-14, and - 15	2	ARI	See Note 2	V	V	100%	None	General chem, cyanide, TAL metals, TCL VOAs, pesticides/PCBs	None
13	7-Oct-94	PW-3,-8,-9, and -13	2	ARI		V	V	100%	None	General chem, cyanide, TAL metals, TCL VOAs, pesticides/PCBs	None

DATA VALIDATION SUMMARY

Sample		1	Sampling		DQOs ⁴					Field and Trip	
Delivery	Data Validation	Samples	Round	Lab	Precision	Accuracy	Detection	Completeness	Major	Analyses	Blank
Group	Report Date	Validated				,	Limits	•	Deficiencies		Samples ⁵
14 ³	11-Oct-94	Monitoring Wells and Portal (Surface) Water	2	ARI and Inland		V	V	100%	None	general chem, cyanide, 524.2, 525.1, 504, TAL metals	LMW5-GW-80894FB LMW5-GW-80894TB LMW3-GW-80894TB LMW2-GW-80894TB
15	24-Jan-95	LMW1, PRT2,LMW7,LMW4 ,LMW8,LMW6, LMW2, LMW3, PRT3, LMW5,PW1, PW7, PW5, PW1, PW3, PW15, PW2, PW4, PW10, PW11, PW6, PW8, PW14, PW13, PW9, PW12	3	Inland	V	٧	٧	100%	None	VOA, SVOCs, pesticide/PCB, herbicides	LMW5-GW-120794FB PW15-121294FB LMSW5-GW- 120794TB
16	25-Jan-95	PW3, PW15	3	ARI	See Note 6	V	V	100%	None	TCL SVOCs, metals, general chemistry	PW15-121294FB
17	19-Jan-95	LMW2, LMW4, LMW6	3	ARI	√	See note 7	V	100%	None	SVOCs, metals, general chemistry	None
18	19-Jan-95	LMW1, LMW7, PRT2	3	ARI	See note 8	√	V	100%	None	SVOCs, metals, general chemistry	None
19	19-Jan-95	PW2, PW4, PW10,PW11	3	ARI	See note 9	√	V	100%	None	TCL SVOC, metals, general, chemistry	None
20	19-Jan-95	PW9, PW12, PW13	3	ARI	See note 10	√	V	100%	None	SVOCs, metals and general chemistry	None
21	19-Jan-95	PW6, PW8, PW14	3	ARI	See note 11	√	V	100%	None	SVOCs, metals and general chemistry	None
22	19-Jan-95	LMW3, PRT3, LMW5	3	ARI	See note 12	√	√	100%	None	SVOCs, metals and general chemistry	LMW5-GW-120794FB
23	19-Jan-95	PW5	3	ARI	√	√	√	100%	None	SVOCs, metals and general chemistry	None
24	19-Jan-95	PW1, PW7	3	ARI	\checkmark	√	V	100%	None	SVOCs, metals and general chemistry	None
25	11-May-95	LMW3, PRT3, LMW5, LMW1	4	ARI	V	\checkmark	√	100%	None	General chemistry, cyanide, TAL metals, SVOAs, pesticides/PCBs	LMW3-GW-31595FB
26	-	LMW2, LMW4, PRT2, LMW6, LMW1, LMW5, PRT3, LMW3, LMW7	4	Inland	V	V	√	100%	None	VOA (524.2)	LMW4-GW-32195TB
27	11-May-95	LMW6, LMW7, PRT2	4	ARI	V	V	V	100%	None	General chemistry, cyanide, TAL metals, SVOAs, pesticides/PCBs	None
28	11-May-95	LMW4, LMW8, LMW2	4	ARI	V	V	V	100%	None	General chemistry, cyanide, TAL metals, SVOAs, pesticides/PCBs	None

DATA VALIDATION SUMMARY

Sample			Sampling		DQOs ⁴					Field and Trip	
Delivery	Data Validation	Samples	Round	Lab	Precision	Accuracy	Detection	Completeness	Major	Analyses	Blank
Group	Report Date	Validated					Limits		Deficiencies		Samples ⁵
29	11-May-95	PW10, PW12	4	ARI	V	V	V	100%	None	General chemistry, cyanide, TAL metals, SVOAs, pesticides/PCBs	PW10-32995FB
30	11-May-95	PW2, PW13, PW3, PW4, PW10, PW12, PW9	4	Inland	V	\checkmark	√	100%	None	VOA (524.2)	PW10-32995FB, PW12 32995TB
31	11-May-95	PW13, PW3, PW4	4	ARI	1	V	V	100%	None	General chemistry, cyanide, TAL metals, SVOAs, pesticides/PCBs	None
32	11-May-95	PW2	4	ARI	V	1	V	100%	None	General chemistry, cyanide, TAL metals, SVOAs, pesticides/PCBs	None
33	11-May-95	PW9	4	ARI	1	V	V	100%	None	General chemistry, cyanide, TAL metals, SVOAs, pesticides/PCBs	None

- 1 Spike recovery for fluoride was unacceptable resulting in qualification of selected sample results as unusable.
- 2 Laboratory did not analyze a matrix spike duplicate, therefore it was not possible to determine if the precision goals specified in the work plan were met.
- 3 A limited review of sample results was conducted. No raw data were submitted with sample results data package. Quality of data has not been determined.
- 4 DQOs are defined in the Work Plan (Golder, 1992a).

VOAs - Volatile Organic Compounds SVOAs - Semi-Volatile Organic Compounds

- 5 No adjustments were made during data validation on the basis of detects in these samples.
- 6 Silicon was detected in the method blank. The RPD for lead was unacceptable in the laboratory blank. The TDS analysis was performed out of the holding time.

These deficiencies resulted in the qualification of data as estimated.

- 7 Spike recovery for silicon was unacceptable resulting in qualification of selected sample results as estimated.
- 8 Aluminum, lead and silicon were detected in the lab blank. The laboratory RPD for Al was unacceptable. The TDS analysis was performed out of the holding time.

These deficiencies resulted in the qualification of data as estimated.

- 9 The laboratory duplicate result for lead is unaccceptable. The qualification of the data is estimated.
- 10 Silicon was detected in the method blank. The laboratory duplicate result for lead was unacceptable. These deficiencies resulted in the qualification of data as estimated.
- 11 The laboratory duplicate result for lead is unacceptable. Turbidity was detected in the laboratory method blank. The qualification of the data is estimated.
- 12- Silicon was detected in the method blank. The RPD for sodium was unacceptable in the laboratory duplicate. These deficiencies resulted in the qualification of data as estimated.

FB - Field Blank	Anions	General Chemistry	
TP - Trip Blank	chloride	рН	Chloride
ARI - Analytical Resources, Inc.	fluoride	conductivity	Fluoride
Inland - Inland Environmental Laboratories	nitrate and nitrate	Total Dissolved Solids	Nitrate and Nitrite
DQOs - Data Quality Objectives	sulfate	Hardness	Sulfate
TAL - Target Analyte List		Turbidity	Carbonate and Bicarbonate
TCL - Target Compound List			